

REMARKS

Reconsideration and allowance are respectfully requested in view of the following remarks.

By this Amendment, claims 2, 3-5, 8-9, 11 and 13-16 have been amended. Claims 1, 6, 7, 10, 12 and 40 have been canceled without prejudice or disclaimer. No new matter is added. Accordingly, claims 2, 3-5, 8-9, 11 and 13-16 are pending in the present application.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-16 and 40 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Gentile (U.S. Patent 5,949,968, hereinafter "Gentile") in view of Quieroz ("Mixed Raster Content MRC model for compound image compression", hereinafter "Quieroz") and Hiroshi (Japanese Patent No. 05-110737, hereinafter "Hiroshi") and further in view of Litwiller (U.S. Patent Application Publication No. 2003/0132960 A1, hereinafter "Litwiller"). The rejection is respectfully traversed.

According to exemplary embodiments of the present invention, an image processing device which extracts character, graphic and photograph regions from image data acquired by reading an original document and performs image processing for the regions and then re-synthesizes them to prepare a document image file allows designation of a desired compression method for each region data. Specifically, the image processing device includes a compression method selection unit for selecting from a plurality of compression methods for each region. In addition, the image processing device includes a compression process mode setting unit which displays a plurality of compression process modes on a display, enabling

a user to select one of the plurality of compression process modes. The image processing device automatically performs, in response to designation of a compression process mode, a compression process for each region data using an optimum compression method. Therefore, even if the user does not have particular knowledge of compression methods to be applied to the individual region data, desired compression processes can be executed for the region data.

FIG. 5 of the present application illustrates an example of a compression process setting screen 103a displayed on the operation panel of the operation section of an image processing device. Referring to FIG. 5, touch keys for "Compression method designation", "MMR", "JBIG", "Flate", "JPEG", "Default" and so forth are displayed on the compression process setting screen 103a. When the user wants to designate compression methods for compression processes to be applied to the individual region data, it will first depress the "Compression method designation" key, and then depress, for each of the character, graphic and photograph regions, a desired compression method key to designate the compression methods individually for the region data.

Referring to FIG. 10 of the present application, the compression process setting screen 103b additionally displays, when compared with the compression process setting screen 103a by the image processing device described above, "Compression processing mode designation" and "Speed preference", "Picture quality preference" and "Size preference" keys. When the user wants to designate a compression processing mode for a compression process to be performed for each region data, it will depress the "Compression processing mode designation" key and further depress a desired one of the compression processing mode keys to

designate a mode of the key.

Claim 2 relates to an image processing device comprising both the compression method selection unit and the compression process mode setting unit, among other things. Specifically, claim 2 is amended to recite an image processing device, comprising, *inter alia*,

- a compression process mode setting unit, said compression process mode setting unit displays a plurality of compression process modes on the display, enabling a user to select one of the plurality of compression process modes; and

- a compression method selection unit for selecting from a plurality of compression modes, one of the plurality of compression methods for each region for the compression process to be performed for each region, wherein the selection unit displays one or more compression methods on the display for each region, enabling a user to select one of the plurality of compression methods in accordance with a type of the region from the plurality of compression methods, and wherein for each type of region, the selection unit displays only compression methods from compression methods in plurality of compression methods that are designated for the type of region.

Support for the compression method selection unit features included in the amended claim 1 can be found in at least FIGS. 9, 10 and 13 and paragraph 0077 and 0079 of the specification.

Gentile, Queiroz, Hiroshi and Litwiller, whether considered individually or in combination, do not disclose the combination of claim 2 that includes the above-recited features. Specifically, the references, whether considered individually or in combination, do not disclose an image processing device that is capable of displaying designated compression methods for each type of region because none of the references discloses the concept of displaying/selecting a compression method for each region. Furthermore, the references, whether considered individually or in

combination, do not disclose an image processing device including compression modes for users to select.

In the paragraph bridging pages 12 and 13 of the Office Action, it is correctly conceded that Gentile, Queiroz and Hiroshi do not disclose that there is a display enabling a user to select one of the plurality of compression methods in accordance with a type of the region. The Office Action alleged that Litwiller remedies the deficiencies of Gentile, Queiroz and Hiroshi.

Applicant notes that in Litwiller, a display unit displays possible compression parameter choices including MH, MR, MMR and JBIG, for the entire message, and the user makes the choice for the entire message by touching the corresponding portion of the touch-sensitive display. Litwiller does not teach or suggest an image processing device capable of allowing a user to specify compression methods for each region. Therefore, Litwiller fails to remedy the deficiencies of Gentile, Queiroz and Hiroshi.

Furthermore, the compression process mode recited in claim 2 allows the user to decide on the compression mode in accordance with his/her preferences even if the user is not familiar with various compression methods. A combination including such features recited in claim 2 is not taught or suggested in the references, whether considered individually or in combination.

Gentile only discloses a processing apparatus which selects a compression method based on compression ratio, computational complexity, and picture quality. Gentile does not disclose an image processing device capable of allowing the user to specify priority matters such as picture quality and compression speed, nor

does Gentile disclose selecting a compression mode for each region based on the user-selected priority.

In the paragraph bridging pages 18 and 19 of the Office Action, it is correctly conceded that Gentile, Queiroz and Hiroshi do not disclose that there is a display enabling a user to select one of the plurality of compression modes. The Office Action alleged that Litwiller discloses displaying compression choices, which are similar to the Gentile's consultant, and that the displaying compression choices allow the user to select a compression parameter on the user touching screen.

Litwiller, however, only discloses allowing a user to select from the possible compression parameter choices, such as MH, MR, MMR and JBIG, for the entire message. Litwiller, however, fails to disclose an image processing device which includes a compression process mode allowing a user specify compression modes, such as picture quality and compression speed as priority matters, and selecting a compression mode based on the user-selected priority. Therefore, Litwiller fails to remedy the deficiencies of Gentile, Queiroz and Hiroshi.

In view of the foregoing, claim 2 is patentable. Claims 3-5, 8-9, 11 and 13-16 are patentable because they include distinguishing features similar to those claim 2. As mentioned above, claims 1, 6, 7, 10, 12 and 40 have been canceled without prejudice or disclaimer.

CONCLUSION

From the foregoing, further and favorable action in the form of a Notice of Allowance is respectfully requested and such action is earnestly solicited.

In the event that there are any questions concerning this Amendment, or the application in general, the Examiner is respectfully requested to telephone the undersigned so that prosecution of present application may be expedited.

Respectfully submitted,

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